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AMENDMENT

Serial Number: Unknown

Title: PLANT RETROELEMENTS AND METHODS RELATED THERETO

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129. A vector that can transfer a nucleic acid to a plant cell comprising the isolated nucleic acid of claim ¹⁰²126.

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130. The isolated nucleic acid of claim ⁷⁹103, that further encodes at least one agronomically-significant characteristic selected from the group consisting of male sterility, self-incompatibility, foreign organism resistance, an improved biosynthetic pathway, environmental tolerance, a photosynthetic pathway, fruit ripening, oil biosynthesis, pigment biosynthesis, seed formation, starch metabolism, salt tolerance, cold/frost tolerance, drought tolerance, and tolerance to anaerobic conditions.

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131. A method to impart agronomically significant characteristics to a plant, comprising contacting the nucleic acid of claim ⁹⁶120 with at least one plant cell under conditions sufficient to allow said nucleic acid to enter said cell.

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132. A method to transfer nucleic acid into a plant cell, comprising contacting the nucleic acid of claim ^{49 50 79}73, 74 or 103 with at least one plant cell under conditions sufficient to allow said nucleic acid to enter said cell.--

REMARKS

Claims 73-132 are now pending in this application. Support for the subject matter of these claims can be found throughout the specification and in the original claims, for example, in the passages indicated below:

Claim 73: Specification at Page 19, Lines 28-29; and Page 41, Lines 5-30.

Claim 74: Specification at Page 11, Line 14 to Page 12, Line 13; and original claims 1 and 22.

Claim 75: Specification at Page 26, Line 26 to Page 28, Line 22.

Claim 76: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 2 and 27.

Claim 77: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 3, 28-30.

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Title: **PLANT RETROELEMENTS AND METHODS RELATED THERETO**

- Claim 78: Specification at Page 12, Line 27 to Page 13, Line 2; Page 14, Lines 19-29; Page 29, Lines 23-36; Page 35, Lines 25-35; original claim 29.
- Claim 79: Specification at Page 13, Lines 1-2; Page 14, Lines 28-29; Page 29, Lines 33-34; Page 35, Lines 34-35; original claim 30.
- Claim 80: Specification at Page 7, Lines 8-12; Page 23, Line 35 to Page 24, Line 4; original claim 4.
- Claim 81: Specification at Page 7, Lines 8-12; Page 24, Lines 2-4; original claims 1 and 5.
- Claim 82: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 3, 28-30.
- Claim 83: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 2 and 27.
- Claim 84: Specification at Page 26, Line 26 to Page 28, Line 22.
- Claim 85: Specification at Page 4, Lines 23-26; Page 7, Line 15 to Page 8; original claims 1 and 6.
- Claim 86: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 3, 28-30.
- Claim 87: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 2 and 27.
- Claim 88: Specification at Page 26, Line 26 to Page 28, Line 22.
- Claim 89: Specification at Page 4, Lines 33-36; Page 5, Line 35 to Page 6, Line 2; Page 8, Line 14 to Page 9, Line 4; original claims 1 and 10.
- Claim 90: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 3, 28-30.
- Claim 91: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 2 and 27.
- Claim 92: Specification at Page 26, Line 26 to Page 28, Line 22.
- Claim 93: Specification at Page 5, Lines 1-4; Page 6, Lines 4-7; Page 9, Line 14 to Page 10, Line 4; original claims 1 and 14.

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Title: PLANT RETROELEMENTS AND METHODS RELATED THERETO

- Claim 94: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 3, 28-30.
- Claim 95: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 2 and 27.
- Claim 96: Specification at Page 26, Line 26 to Page 28, Line 22.
- Claim 97: Specification at Page 5, Lines 11-14; Page 6, Lines 14-17; Page 10, Line 15 to Page 11, Line 4; original claims 1 and 18.
- Claim 98: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 3, 19, 28-30.
- Claim 99: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 2 and 27.
- Claim 100: Specification at Page 26, Line 26 to Page 28, Line 22.
- Claim 101: Specification at Page 12, Lines 15-25; Page 13, Lines 9-25; Page 14, Lines 7-17; original claims 24 and 25.
- Claim 102: Specification at Page 8, Lines 6-12; Page 9, Lines 6-12; Page 10, Lines 6-13; Page 28, Line 24 to Page 30, Line 17; original claims 9, 13, 17, 21, 32, 43 and 44.
- Claim 103: Specification at Page 19, Line 30; Page 41, Lines 5-30.
- Claim 104: Specification at Page 26, Line 26 to Page 28, Line 22.
- Claim 105: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 2 and 27.
- Claim 106: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 3, 28-30.
- Claim 107: Specification at Page 12, Line 27 to Page 13, Line 2; Page 14, Lines 19-29; Page 29, Lines 23-36; Page 35, Lines 25-35; original claim 29.
- Claim 108: Specification at Page 13, Lines 1-2; Page 14, Lines 28-29; Page 29, Lines 33-34; Page 35, Lines 34-35; original claim 30.
- Claim 109: Specification at Page 7, Lines 8-12; Page 23, Line 35 to Page 24, Line 4; original claim 4.

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- Claim 110: Specification at Page 7, Lines 8-12; Page 24, Lines 2-4; original claims 1 and 5.
- Claim 111: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 3, 28-30.
- Claim 112: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 2 and 27.
- Claim 113: Specification at Page 26, Line 26 to Page 28, Line 22.
- Claim 114: Specification at Page 4, Lines 23-26; Page 7, Line 15 to Page 8; original claims 1 and 6.
- Claim 115: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 3, 28-30.
- Claim 116: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 2 and 27.
- Claim 117: Specification at Page 26, Line 26 to Page 28, Line 22.
- Claim 118: Specification at Page 4, Lines 33-36; Page 5, Line 35 to Page 6, Line 2; Page 8, Line 14 to Page 9, Line 4; original claims 1 and 10.
- Claim 119: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 3, 28-30.
- Claim 120: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 2 and 27.
- Claim 121: Specification at Page 26, Line 26 to Page 28, Line 22.
- Claim 122: Specification at Page 5, Lines 1-4; Page 6, Lines 4-7; Page 9, Line 14 to Page 10, Line 4; original claims 1 and 14.
- Claim 123: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 3, 28-30.
- Claim 124: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 2 and 27.
- Claim 125: Specification at Page 26, Line 26 to Page 28, Line 22.
- Claim 126: Specification at Page 5, Lines 11-14; Page 6, Lines 14-17; Page 10, Line 15 to Page 11, Line 4; original claims 1 and 18.

- Claim 127: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 3, 19, 28-30.
- Claim 128: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 2 and 27.
- Claim 129: Specification at Page 26, Line 26 to Page 28, Line 22.
- Claim 130: Specification at Page 12, Lines 15-25; Page 13, Lines 9-25; Page 14, Lines 7-17; original claims 24 and 25.
- Claim 131: Specification at Page 8, Lines 6-12; Page 9, Lines 6-12; Page 10, Lines 6-13; Page 28, Line 24 to Page 30, Line 17; original claims 9, 13, 17, 21, 32, 43 and 44.
- Claim 132: Specification at Page 13, Lines 9-12; Page 14, Lines 31-33; Page 29, Lines 8-17; Page 36, Lines 6-9.

To conform the above-referenced application to the requirements of 37 C.F.R. §§ 1.821 through 1.825, a paper copy of a Sequence Listing is submitted herewith. The paper copy of the Sequence Listing in this application is identical to the computer readable form of the Sequence Listing filed in application Serial No. 09/322,478, filed May 28, 1999. In accordance with 37 C.F.R. § 1.821(e), please use the computer readable form filed on May 28, 1999 in application Serial No. 09/322,478 as the computer readable form for the instant application.

It is respectfully submitted that the pending claims are in condition for allowance, which action is earnestly solicited. The Examiner is invited to contact the below-signed attorney with any questions regarding the present application.

Please charge any addition fees due, or credit any overpayment to PTO Deposit Account No. 19-0743.